

CLAIMS

What is claimed is:

- 5 1. A distributed system, comprising:
 master clock coupled to a timing signal path,
 the master clock having means for generating a timing
 signal on the timing signal path in response to a
 time event associated with the master clock;
10 slave clock coupled to the timing signal path,
 the slave clock having means for adjusting a local
 time in the slave clock in response to the timing
 signal received via the timing signal path.
- 15 2. The distributed system of claim 1, wherein the
 timing signal comprises at least one signal pulse
 which is aligned to the time event.
3. The distributed system of claim 1, wherein the
20 means for adjusting includes means for generating a
 time-stamp in response to the timing signal.
4. The distributed system of claim 3, wherein the
 means for adjusting further includes means for
25 obtaining a time-stamp from the master clock that
 indicates a local time in the master clock.
5. The distributed system of claim 4, wherein the
 means for obtaining comprises means for obtaining the
30 time-stamp via a network.

6. The distributed system of claim 4, wherein the means for obtaining comprises means for obtaining the time-stamp via the timing signal path.

5 7. The distributed system of claim 4, wherein the means for adjusting further comprises means for determining a correction to the local time in the slave clock in response to the time-stamps.

10 8. The distributed system of claim 1, wherein the timing signal comprises a continuous frequency signal.

15 9. The distributed system of claim 8, wherein the continuous frequency signal includes a distinguished pattern which is aligned to the time event.

20 10. The distributed system of claim 9, wherein the means for adjusting includes means for generating a time-stamp in response to the distinguished pattern.

25 11. The distributed system of claim 9, wherein the means for adjusting further includes means for obtaining a time-stamp from the master clock that indicates a local time in the master clock.

30 12. The distributed system of claim 11, wherein the means for obtaining comprises means for obtaining the time-stamp via a network.

13. The distributed system of claim 11, wherein the means for obtaining comprises means for obtaining the time-stamp via the timing signal path.

14. The distributed system of claim 13, wherein the time-stamp from the master clock is encoded in the continuous frequency signal.

5 15. The distributed system of claim 11, wherein the means for adjusting further comprises means for determining a correction to the local time in the slave clock in response to the time-stamps.

10 16. A clock node, comprising:
means for communication via a timing signal path;
means for generating a timing signal on the timing signal path in response to a time event.

15 17. The clock node of claim 16, further comprising:
means for generating a time-stamp in response to the time event;
means for transferring the time-stamp via a
20 network.

18. The clock node of claim 16, further comprising:
means for generating a time-stamp in response to the time event;
25 means for transferring the time-stamp via the timing signal path.

19. The clock node of claim 16, wherein the means for generating a timing signal comprises means for
30 generating a continuous frequency timing signal.

20. A clock node, comprising:

means for communication via a timing signal path;

means for adjusting a local time in response to a timing signal received via the timing signal path.

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21. The clock node of claim 20, wherein the means for adjusting includes means for generating a time-stamp in response to the timing signal.

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22. The clock node of claim 20, wherein the means for adjusting includes means for obtaining a time-stamp for the time event via a network.

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23. The clock node of claim 20, wherein the means for adjusting includes means for obtaining a time-stamp for the time event via the timing signal path.

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24. The clock node of claim 20, further comprising means for generating a local clock frequency by phase locking to the timing signal.